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Easy to make

BREAD and ROLLS

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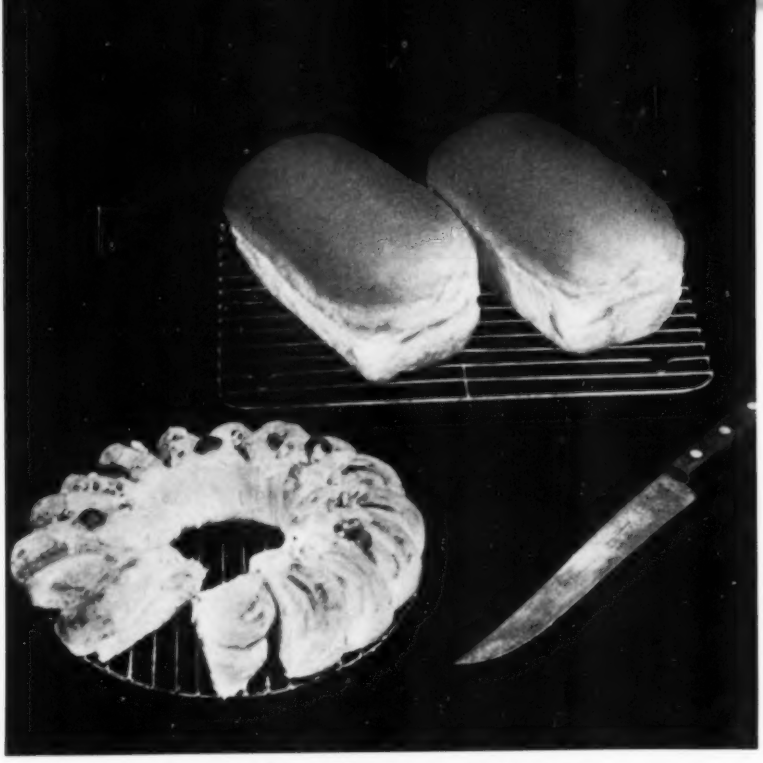

Cool rolls and bread on a cooling rack

Easy to make BREAD and ROLLS

LOLA T. DUDGEON and MILDRED DUNN

Today, making bread at home is a simple, easy task compared to what it was in grandmother's day. Grandmother always started her bread-making the night before baking day, with yeast of uncertain quality and flour made from home-grown wheat. Today your corner grocery store provides you with yeast of good quality and enriched flour. Add to these some salt, sugar, fat, and liquid—and you can make delicious bread while you are getting the family lunch or dinner.

BREADMAKING

The breadmaking directions in this bulletin should help you to prepare a loaf of bread with the following characteristics:

Shape—well proportioned, with evenly rounded top

Crust—uniformly brown, except slightly darker on top; about $\frac{1}{8}$-inch thick; tender and smooth; not split or bulged

Volume—light in weight in proportion to size

Texture—tender elastic crumb; free from dryness or doughiness

Grain—small cells evenly distributed; thin cell walls

Color of crumb—characteristic of ingredients used; free from dark streaks

Flavor—free from sourness or bitterness; characteristic of ingredients

ENRICHED WHITE BREAD

Yield: Two 1-pound loaves
Size of pan: 9 x 5 x 3 inches
Temperature: 400°F.
Baking time: 30 to 35 minutes

2 cups fluid milk
1 package compressed or granular yeast
$\frac{1}{4}$ cup water
2 tablespoons sugar
2 teaspoons salt
2 tablespoons fat
6 cups flour (approximate measure)

When Fluid Milk Is Used:

1. Scald milk, 190°F. Use a dairy thermometer to test temperatures of milk and other ingredients (figure 1).

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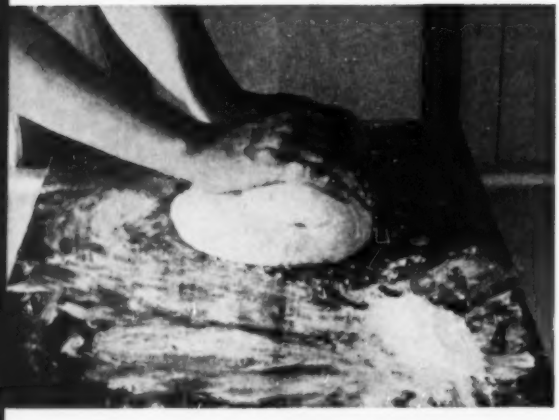


2. Soften yeast in lukewarm water at 95°F., 5 to 10 minutes.
3. Measure sugar, salt, and fat into mixing bowl.
4. Add hot milk and stir until sugar and salt are dissolved and the fat is melted.
5. When the milk mixture is lukewarm, 95°F., add the softened yeast. Test with a thermometer or with a drop of liquid on the wrist (figure 2). If the mixture feels neither cold nor warm, it is lukewarm.
6. Add about half of the flour to the mixture and beat vigorously with a wooden spoon, at least 75 strokes.
7. Add enough more flour to make a soft dough, adding ½ cup at a time.
8. Turn dough out onto a floured board (figure 3) and allow it to rest 10 minutes; cover it with wax paper to prevent drying. Clean dough from the sides of the mixing bowl and grease the bowl.
9. Knead the dough until it is smooth and satiny—about 10 minutes or until the dough springs back when you press it with your finger. To knead, fold the dough over on itself (figure 4). With the lower part of your palms, push the dough with two or three rocking motions (figure 5); turn the

dough one-quarter way around on the board, fold it over again, and repeat the kneading until the dough is smooth and satiny.

10. Shape the dough into a ball and place it in the greased bowl (figure 6). Grease the surface of the dough lightly with melted fat or oil; insert thermometer into dough (figure 7), cover, and let rise (out of a draft) at 85°F. or a few degrees lower, until the dough doubles in bulk or retains the imprint of your finger when you press it (figure 8). The rising time may vary from one to three hours, depending on the temperature, the amount of yeast in the dough, and the type of dough.
11. Punch down the dough (figure 9) or turn it under, to remove all gas bubbles. The dough may be allowed to rise a second time, but a satisfactory product can be made when bread has risen only once.
12. Divide the dough into two equal portions (figure 10) and let it rest, covered, about 10 minutes. The rest period makes the dough easier to handle.

13. Shape the dough into loaves; roll each portion of the dough into a rectangle about 15 inches long and 9 inches wide (figure 11).
14. Fold one-third of the rolled dough lengthwise; on the folded edge press firmly from the center toward the ends to remove any trapped air. Now fold the other third of the long side over and seal the same as the first fold (figure 12).
15. Overlap the ends of the folded dough so that the loaf is slightly shorter than the bread pan (figure 13). Press out any trapped air.
16. Fold the dough lengthwise in thirds and seal well (figure 14). Place the shaped dough in the greased baking pan with the sealed edge down (figure 15).
17. Brush the top lightly with melted fat or oil; cover with wax paper and allow to rise at 85°F., or a few degrees lower, until double in bulk (figure 16).
18. Bake pound loaves 30 to 35 minutes in a moderately hot oven, 400°F. if you use a metal pan; 375°F. if you use ovenglass. For loaves larger than a pound, bake 10 minutes longer.

19. The bread is done when it shrinks from the pan or the loaf sounds hollow when you tap it with your fingers.
20. Remove the loaves from the pans immediately and place them on a cooling rack (figure 17).
21. When the loaves are thoroughly cold, place them in a clean, well-aired, covered container.

When Dry Milk Is Used:

1. In place of the fluid milk, use ½ cup dry milk and 2 cups of water. Soften yeast in 1 cup of lukewarm water, 95°F., 5 to 10 minutes.
2. Measure sugar, salt, and fat into mixing bowl; add 1 cup *hot* water and stir until sugar and salt are dissolved and the fat is melted.
3. When the sugar-fat mixture is lukewarm, 95°F. or less, add the softened yeast.
4. Sift ½ cup of dry milk with about half of the flour. For a more nutritious loaf, use 1 cup of dry milk. Follow steps 6 to 21 in the recipe given on pages 6-9.

Variations:

Half and half wheat bread: Follow the bread recipe on page 5. Use 3 cups of whole wheat flour in place of 3 cups of all-purpose flour in step 6.

BREAD FORMULA

This recipe was developed by Prof. Clive McCay, nutritionist at Cornell University.

Yield: Two 1-pound loaves
Size of pan: 9 x 5 x 3 inches
Temperature: 400°F.
Baking time: 30 to 35 minutes

1 package compressed or granular yeast
1 cup water
1 tablespoon salt
4 teaspoons sugar
4 teaspoons shortening
1 cup hot water
5 to 5½ cups unbleached flour
6 tablespoons soy flour (full fat)
½ cup nonfat dry milk

1. Soften yeast in 1 cup of water, 95°F. or less, and let stand 5 to 10 minutes to soften.
2. Measure salt, sugar, and shortening into mixing bowl.
3. Add 1 cup *hot* water and stir until sugar and salt are dissolved and the fat is melted.
4. Combine about half the flour with the soy flour and nonfat dry milk. Follow steps 6 to 21 in the recipe given on pages 6-9.

IMPORTANT STEPS

Scald fluid milk: Milk, even though pasteurized, needs to be scalded. The bacteria left in the milk will grow during the rising of the dough and may cause an off-flavor in the bread. The best scalding temperature for milk is 185° to 195°F. Scalding the milk within this temperature range kills all the bacteria, and the loaf will have a better volume and texture than one made with milk scalded at a lower temperature.

Add yeast when milk mixture is lukewarm: Yeast is tiny plants; liquid that is too warm will kill them. The softened yeast should be added when the milk mixture is 95°F. or lower. If you have no thermometer put a drop on the inside of your wrist to tell if the mixture is lukewarm. If the drop feels neither warm nor cold, it is safe to add the yeast.

Rest periods for the dough: Allow the dough to rest about 10 minutes before you knead it. It then requires less flour because the dough tightens. Before you shape the dough into loaves or rolls, again allow it to rest another 10 minutes. This makes the dough easier to handle.

Kneading: Thorough kneading mixes the flour and other ingredients. It develops the gluten which helps to hold in the gas made by the yeast.

Rising period: The rising period may determine the quality of your bread. Allow the dough to rise between 75° and 85°F. At a temperature lower than 75°F. the rising period will be prolonged. At a temperature above 85°F. an off-flavor may develop.

Good bread can be made when you allow the dough to rise only once before it is shaped. A finer textured bread may result with a second rising.

Baking temperature: Baking sets the gluten and stops the gas formation. Four hundred degrees F. is the best temperature for baking bread in a metal pan. More thiamine (vitamin B_1) is preserved at this temperature than at temperatures above or below 400°F. When ovenglass pans are used, 375°F. may be a better baking temperature than 400°F.

Bread is done when it shrinks from the pan or sounds hollow when you tap the top of the loaf with your fingers. Remove the bread from the pan *immediately*. To prevent steaming of the crust, place the loaf on a cooling rack or across the top of a pan. This allows air to circulate freely around the crust.

Storage of bread: Allow the bread to cool thoroughly; then place it in a clean, well-aired, covered container, or wrap it well and freeze it.

INGREDIENTS

Flour: Generally, all-purpose flour is used to make bread in the home. It contains enough gluten to make the framework for the loaf.

Sugar: Sugar furnishes food for the yeast and aids in browning the loaf.

Salt: Salt improves the flavor and texture of the bread. It controls yeast action so that the dough does not rise too quickly. Too much salt slows the rising.

Yeast: Yeast is the leavening agent in the bread. When the tiny yeast plants feed on sugar, they produce carbon dioxide gas which makes the dough rise.

Yeast may be obtained in several forms, such as dry, compressed, and granular. The compressed cakes are moist and must be kept under refrigeration or frozen. Dry yeast cakes and granular yeast will keep longer if they are stored in the refrigerator.

Fat: Fat used in bread may be lard, a hydrogenated fat, butter, margarine, or cooking oil. The fat used in bread increases tenderness and volume, improves texture, flavor, and keeping quality; it also contributes to the golden-brown color of the crust.

Liquid: Liquid used in bread may be milk or water. Different forms of milk, such as fluid milk, buttermilk, evaporated milk, or dry milk, may be used. Milk in any of these forms increases the food value of the bread and improves its keeping quality. Bread made with water has a nutty flavor and has a crisper crust than bread made with milk. Water in which potatoes were cooked may also be used.

Other ingredients: Other ingredients that may be used in bread are eggs, fruits, nuts, and spices. These ingredients are usually used in fancy breads and rolls. Eggs added to plain bread and rolls increase their nutritive value and give flavor and creamy color to the products; they also improve their texture.

BREAD FAULTS AND THEIR CAUSES

Poorly Shaped Loaf

1. Inexperience in handling
2. Dough too stiff or not stiff enough
3. Dough too light before baking
4. Oven not hot enough or heat uneven

Coarse Grain

1. Oven temperature too low
2. Too much rising before baking

Streaks

1. Dough allowed to dry on top during rising period
2. Uneven mixing or kneading
3. Dry flour folded into loaves during shaping
4. Dough too heavily greased on top during rising

Crust Splitting on Top or Sides

1. Oven too hot at first or uneven heat in oven

Soggy or Heavy

1. Insufficient rising or baking
2. Poor yeast or poor flour

Thick Cell Walls

1. Too little fermentation

2. Too hard kneading before dough is shaped

Off-flavor

1. Old yeast
2. Too long rising of dough
3. Too high temperature during rising
4. Too slow or incomplete baking
5. Insufficient scalding of milk

YEAST ROLLS

Yeast rolls are usually made from dough that contains more sugar and fat than bread dough. Eggs are frequently added. However, you may like to make plain rolls occasionally from part of your bread dough when you make bread.

YEAST ROLLS

Yield: 3 dozen rolls
Pan: baking pans or sheets
Temperature: 400°F.
Baking time: 15 to 20 minutes
2¼ cups fluid milk
1 package compressed or granular yeast
¼ cup water
¼ cup sugar
2½ teaspoons salt
1/3 cup fat
1 egg
7 to 8 cups flour

When Fluid Milk Is Used:

1. Scald milk, 190°F.
2. Soften yeast in lukewarm water, 95°F., 5 to 10 minutes.
3. Measure sugar, salt, and fat into a mixing bowl.
4. Add hot milk and stir until sugar and salt are dissolved and fat is melted.
5. When the milk mixture is lukewarm, 95°F., add the softened yeast.
6. Add the egg and beat until well mixed.
7. Add about half the flour and beat vigorously with a wooden spoon at least 75 strokes.
8. Add enough more flour to make a soft dough, adding ½ cup at a time.
9. Turn dough out onto a floured board and allow dough to rest 10 minutes; cover it with wax paper to prevent drying. Grease the mixing bowl.
10. Knead the dough until it is smooth and satiny—about 5 to 10 minutes or until the dough springs back when you press it with your finger.
11. Shape the dough into a ball and place it in the greased bowl. Grease the surface of the dough lightly with melted fat or oil; cover and let rise at 85°F. or a few degrees lower, until the dough doubles in bulk or retains the imprint of your finger when you press it.
12. Punch down the dough or turn it under, to remove all gas bubbles.

13. Shape into rolls and place on greased baking sheets. Let the dough rise again, until double in bulk.
14. Bake plain rolls 12 to 15 minutes in a hot oven, 400°F.

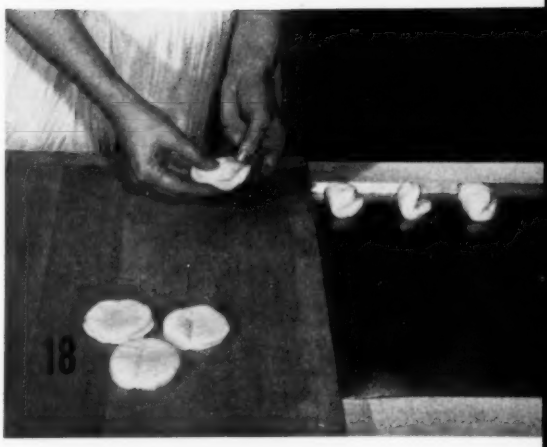
When Dry Milk Is Used:

1. Soften the yeast in 1 cup lukewarm water, 95°F., 5 to 10 minutes.
2. Measure sugar, salt, and fat into mixing bowl.
3. Add 1¼ cups hot water and stir until sugar and salt are dissolved and the fat is melted.
4. When the mixture is lukewarm, 95°F. or less, add the softened yeast.
5. Sift ½ cup dry milk with about half the flour. Follow steps 6 to 14 in the recipe for rolls made with fluid milk, pages 12-13.

Various types of rolls made from basic roll dough

Parker House Rolls

Roll a portion of the dough to 1/3-inch thickness; cut it with a 2½-inch biscuit cutter. Cover the cut dough with wax paper and let it rest 15 minutes. Then make a *deep crease* through the center of each round. Grease one-half with melted shortening and fold over, the crease serving as a hinge (figure 18). Place in a greased pan about one inch apart. Let rise until double in bulk. Bake in a hot oven, 400°F., 12 to 15 minutes.



Pan Rolls

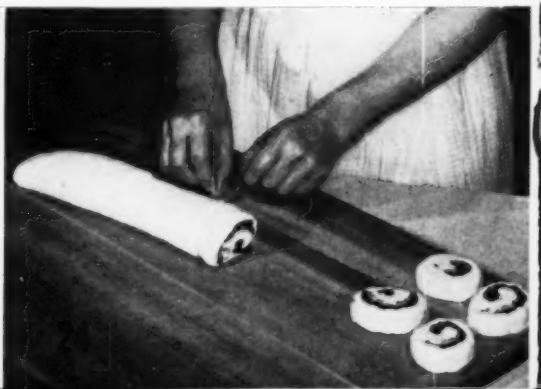
Roll a portion of the dough to 1/3-inch thickness; cut rolled dough with a 2½-inch biscuit cutter. Form each cut piece into a ball by drawing cut edges of dough under and pinching together (figure 19). Dip each ball of dough into melted fat or oil and place them close together in a greased pan. Let rise, until double in bulk. Bake in a hot oven, 400°F., 12 to 15 minutes.

Swedish Tea Ring

Roll half of the dough into an oblong 9 inches by 18 inches and $\frac{1}{4}$ inch thick. Cover the rolled dough with 2 tablespoons of melted butter and a mixture of 1/3 cup brown sugar, $\frac{1}{2}$ teaspoon cinnamon, and 1/3 cup currants, nuts, or raisins. Roll the dough lengthwise, jelly-roll fashion (figure 20); seal the edge firmly. Place sealed edge down on a greased baking sheet. Shape into a ring and seal the ends together by pinching dough (figure 21). With scissors, cut through ring to within $\frac{1}{2}$ inch of the inner edge, in slices one-inch wide (figure 22). Twist each slice slightly on its side (figure 23). Brush with melted butter and cover with wax paper; let rise until double in bulk, and bake at 375°F. about 25 minutes.

Cinnamon Rolls

Roll out half of the dough into an oblong 9 inches by 18 inches and $\frac{1}{4}$-inch thick. Brush with melted butter and sprinkle with a mixture of $\frac{1}{2}$ cup sugar, 1 teaspoon cinnamon, and $\frac{1}{2}$ cup raisins (optional). Roll the dough jelly-roll fashion and seal the edge. Cut in one-inch slices with a string as shown in figure 24. Place cut side down in greased muffin tins or in a shallow pan about $\frac{1}{2}$ inch apart. Brush



with melted butter and let rise until double in bulk. Bake at 375°F. about 20 minutes.

Pecan Rolls

In each cup of muffin pans place 2 teaspoons brown sugar, ½ teaspoon melted butter, ¼ teaspoon water, and 4 to 5 pecan halves. Roll out half of the dough into an oblong 9 inches by 18 inches and ¼ inch thick. Brush with melted butter and sprinkle with ¾ cup brown sugar. Roll the dough jelly-roll fashion and seal the edge. Cut in one-inch slices with a string as shown in figure 24. Place cut side down in muffin tin. Let rise until double in bulk. Bake at 375°F. about 20 minutes.

Crescents

Roll half of the dough into a circular shape about 12 inches in diameter and ¼ inch thick. Cut into 12 pie-shaped pieces. Brush with melted butter; beginning at the outer edge, roll up each section with the point underneath (figure 25). Place on greased baking sheet, cover with wax paper, and let rise until double in bulk. Bake at 400°F. 15 to 20 minutes.

Knots

Roll out half of the dough in a rectangular shape about 1/3-inch thick. Cut into strips 1½ inches wide. For various knots cut the strips in 6 to 10 inch lengths. Roll each strip between your palms or on a board, to make the strip round. Tie the shorter strips in single knots, the longer ones in double knots (figure 26). Place on greased pan and let rise until double in bulk. Bake at 400°F. about 15 minutes.

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